

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A system for transferring multimedia information from a source location to a destination location through one or more networks, the system comprising:
 - a source output adapted to provide a first stream of information in a first protocol characterized by one of a plurality of source capabilities;
 - a destination input adapted to receive a second stream of information in a second protocol characterized by one of a plurality of destination capabilities;
 - a proxy transcoder server ("PTS") coupled between the source output and the destination input, wherein the PTS is adapted to perform transcoding of multimedia system protocols, one or more audio streams, and one or more video streams, the multimedia system protocols selected from the group consisting of [[H.320,] H.323, H.324, and SIP, the PTS comprising:
 - a capability ~~negotiation~~ exchange module adapted to:
 - perform a capability ~~negotiation~~ exchange process defined by the first protocol to provide one source capability of the plurality of source capabilities;
 - determine one or more characteristics of a media channel coupled to the source output and adapted to support the first stream of information, the one or more characteristics associated with the one source capability of the plurality of source capabilities;
 - and
 - identify one destination capability of the plurality of destination capabilities;
 - a selection module adapted to select a transcoding process based upon the one source capability of the plurality of source capabilities and the one destination capability of the plurality of destination capabilities; and
 - a real-time transcoding module adapted to use the selected transcoding process to process the first stream of information.

2. (Previously Presented) The system of claim 1 wherein the one or more networks are selected from a group comprising the Internet, a mobile network, a wide area network, a local area network, PTSN, ISDN, and SONET.

3. (Currently Amended) The system of claim 1 wherein ~~at least one of the source output and the destination input is that of a remote device~~ the source output is in a first device different than the PTS and the destination input is in a second device different than both the first device and the PTS.

4. (Currently Amended) The system of claim 3 wherein the capability exchange module identifies at least one of the output and input of the ~~remote~~ first device, based on information stored in the device, based on user subscription information stored in a network database of the user's service provider, based on in-band information command and control within a stream exchanged, or pre-set by the service provider.

5. (Currently Amended) The system of claim 1 wherein the transcoding process selected by the capability exchange module transcodes data from a first bitstream protocol mode to a second bitstream protocol mode.

6. (Currently Amended) The system for claim 1 wherein the PTS further ~~comprising~~ comprises a rate control module regulating the data rate produced by the PTS.

7. (Original) The system for claim 6 wherein the rate control module detects network status information by calculating "round-trip" time information based on network congestion information, bandwidth information, quality information from a network host or network access provider, or internal PTS mechanisms.

8. (Previously Presented) The system for claim 7 wherein the "round-trip" time information can be measured by sending a "ping" packet to either the source location or the destination location.

9. (Currently Amended) The system for claim 6 wherein the rate control module detects the network status information by using in-band ~~information~~ bit-rate instructions.

10. (Original) The system for claim 6 wherein the rate control module regulates the data rate by changing transcoding parameters.

11. (Original) The system for claim 6 wherein the rate control module regulates the data rate by instructing network equipment to give a higher priority to data being handled by the PTS than other data.

12. (Canceled).

13. (Previously Presented) The system of claim 1 wherein the one or more networks are selected from a plurality of different networks, each of the one or more networks being configured for a particular standard.

14. (Original) The system of claim 1 wherein the PTS further comprising a network addressing module to determine the network address of the source output and the network address of the destination input.

15. (Original) The system of claim 1 wherein the PTS further comprising a media mixing process to combine bitstreams associated with two or more audio streams and retransmit the combined bitstreams to the destination input.

16. (Original) The system of claim 1 wherein the PTS further comprising an intellectual property rights management module to manage and process information on intellectual property rights.

17. (Original) The system of claim 1 wherein the PTS further comprising a encryption and decryption process to encrypt and decrypt the data.

18. (Original) The system for claim 6 wherein the rate control module regulates the data rate dynamically and in real time.

19. (Original) The system of claim 1 wherein the transcoding module are programmable to transcode between various types of capabilities for the source output and various types of capabilities for the destination input.

20. (Currently Amended) A system for transferring multimedia information from source to destination locations through one or more networks, the system comprising:

- a source output coupled to a first network and adapted to provide a first stream of information, wherein the source output is adapted to support a first protocol selected from the group consisting of [[H.320,] H.323, H.324, RTSP, and SIP;
- a destination input coupled to a second network and receiving a second stream of information, wherein the destination input is adapted to support a second protocol selected from the group consisting of H.320, H.323, H.324, and SIP;
- a proxy transcoder server ("PTS") coupled between the source output and the destination input, the proxy transcoder server comprising:
 - a capability ~~negotiation~~ exchange process coupled to the source output, the capability ~~negotiation~~ exchange process being adapted to identify the first protocol supported by the source output, determine one or more characteristics of a media channel coupled to the source output utilizing a message-based command and control protocol for negotiation in the capability exchange process, wherein the media channel is adapted to support the first stream of information, and adapted to identify the second protocol supported by the destination input;
 - a transcoding process coupled to the capability process, the transcoding process comprising a plurality of transcoding modules numbered 1 through N, where N is an integer greater than 1, the transcoding process being adapted to select one of the plurality of transcoding modules based upon the first protocol and the second protocol; and
 - a bit rate control process coupled to the transcoding process, the bit rate control process being adapted to receive a network status information from the first network, the bit rate control being adapted to adjust a status of the stream of information based upon the network status information.

21. (Original) The system of claim 20 wherein the status information comprises a ping.

22. (Original) The system of claim 20 wherein the status is a stop status.

23. (Original) The system of claim 20 wherein the status is a prioritization status.

24. (Original) The system of claim 20 wherein the status is to adjust a bit rate by selecting a lower bit rate coder.

25. - 27. (Canceled).

28. (Previously presented) The system of claim 1 wherein the H.324 multimedia system protocol comprises 3GPP-324M.

29. (Previously presented) The system of claim 20 wherein at least one of the first protocol or the second protocol is 3GPP-324M.

30. (Canceled).

31. (Currently Amended) The system of claim 1 wherein the capability ~~negotiation~~ exchange process utilizes H.245.

32. (Currently Amended) The system of claim 1 wherein the capability ~~negotiation~~ exchange process utilizes SDP.

33. (Currently Amended) The system of claim 1 further comprising:
a second source output adapted to provide a third stream of information in the first protocol characterized by one of a plurality of source capabilities; and
a second real-time transcoding module adapted to use a second transcoding process to process the third stream of information, wherein:

the capability ~~negotiation~~ exchange module is further adapted to determine one or more characteristics of a second media channel coupled to the second source output and adapted to support the third stream of information; and

the selection module is further adapted to select the second transcoding process.

34. (Previously presented) The system of claim 33 wherein the media channel comprises a video channel and the second media channel comprises an audio channel.

35. (Previously presented) The system of claim 1 wherein the second stream of information comprises a transcoded stream of media converted for transport in the second protocol.

36. (Currently Amended) The system of claim 1 further comprising performing a second capability ~~negotiation~~ exchange process defined by the second protocol to provide one destination capability of the plurality of destination capabilities.

37. (Currently Amended) The system of claim 36 wherein the second capability ~~negotiation~~ exchange process translates one or more of the plurality of source capabilities to provide one or more of the plurality of destination capabilities.

38. (Canceled).

39. (New) The system of claim 1 wherein the capability exchange module is further adapted to match the source capability and the destination capability.

40. (New) The system of claim 1 wherein the one or more of the plurality of source capabilities are transcoded at the PTS to one or more destination capabilities in the second protocol.

41. (New) The system of claim 33 wherein the media channel comprises a first video channel and the second media channel comprises a second video channel and the source output is in a first device different than the PTS and the second source output is in a second device different than the first device and the PTS device.